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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,914	01/05/2004	Kazunori Chiba	247303US3CONT	1981

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C. IRVIN MCCLELLAND
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

RAO, G NAGESH

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/750,914	Applicant(s) CHIBA ET AL.	
	Examiner G. Nagesh Rao	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 10-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed on 8/18/06, in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on has been entered.

Claim Objections

2) Claims 10 and 11 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 10 refers to a process limitation of the temperature's relation to the roller which is not further limiting the parent claims directed towards the apparatus's structure. Although applicant has amended the claim it still objected to because the limitation put forth is a recitation of intended use and bears no weight to the structures physical limitation. Whereas claim 11 refers to the product worked upon by the apparatus. Said product is capable of being worked

upon in the device and does not structurally limit the device's feature. Had the substance been positively recited into the device and structure of the claimed apparatus then it could possibly be given weight and further limit device's structure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3) Claims 1, 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flosdorf (US Patent No. 2,608,472).

Flosdorf 472 teaches a sublimation apparatus where there is taught a device capable for handling evaporable solid material, and is comprised of a type of housing (11 and 51) at least one rotatable roller capable of handling an evaporation substance (10) and at least one rotatable roller capable of handling a precipitation means (19) both installed in housing means. Both rollers are equipped with heating and cooling means that can be altered to lower or raise the temperature pertaining to each roller depending on how the operator sees fit (See Col 3 Lines 31-50, Col 4 Lines 3-12, 54-61, and Col 5 Lines 1-10). Furthermore Flosdorf 472 teaches a scraping means for removing excess material that may be adhering to the rollers (Col 3 Lines 51-71, elements 12 and 20). Examiner would also like to point out that claim 11 refers to the product worked upon by the apparatus and does not bear weight to the structural limitation of the said claimed device.

Finally the Flosdorf 472 apparatus is inherently capable of handling a process comprised of batch-wisely or continuously evaporating or sublimating the solid material deposited on a surface of a rotatably installed evaporation roller; batch-wisely or continuously precipitating the evaporated or sublimated material on a rotatably installed precipitation roller; batch-wisely or continuously scraping off crystals precipitated on a surface of the precipitation roller, at a scraping section, and batch-wisely or continuously discharging the crystals.

However the amended claims 1 and 7 recite a structural limitation with respect to the placement of the precipitation roller being disposed diagonally above the evaporation roller.

Examiner understands and appreciates the differentiation put forth by applicant, but upon reviewing the prior art, there is nothing precluding the teachings of Flosdorf 472 from shifting the location of the rotatable roller handling a precipitation means (19). From figure 1 roller (19) is slightly diagonally disposed from the rotatable roller (10) capable of handling the evaporation substance. Examiner is unable to reason why Flosdorf 472 is not capable of being modified in a manner as claimed by applicant nor see a functional differentiation that would be possible in differing applicant's invention from the prior art.

At the time of the invention it would be obvious to one having ordinary skill in the art to view applicant's invention as a rearrangement of parts with respect to the prior art taught by Flosdorf 472. See *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) (a board decision on rearrangement of parts)

4) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flosdorf (US Patent No. 2,608,472) in view of Aleksandro (SU 1535565 Russian Publication).

Although the teachings of Flosdorf 172 teaches a sublimation apparatus it however lacks a defined teaching of an adjustable means between the two rollers.

Aleksandro 565 pertains to a sublimation unit that has a sealed evaporation chamber and condenser with lid, drive to rotate, and move condenser backwards/forwards, etc...

Aleksandro 565 teaches that it is known to have a driving means to move forward or backward the condenser which has the means for rotating, therefore implying that it is well known to have distance adjustment means on these rollers.

Therefore at the time of the invention it would have been obvious to one with ordinary skill in the art to implement such a design to coordinate a movement means between the two rollers separately or in relation to one another and inevitably allowing for that distance changing means to occur as a result of this known modification.

5) Examiner would like to point out that the claims are so broadly written that they would very well encompass a filter being disposed between the two rollers. There is no language defining that the apparatus not consist, just merely comprise of the following elements, which Folsdorf 472 appears to show in Figure 1. Next, in claim 2 with reference to the adjustable distance between the evaporation and

precipitation roller, is so broad in understanding the claim that Folsdorf 472 too covers that by the mere inherency that the rollers would expand or compress upon use and thermal fluctuations alone on the material that they could become closer or farther apart from each other. Examiner is unable to understand how dependent claim 2 denotes novelty regarding the between the adjustability factor between the two rollers. Furthermore where is the structural limitation being claimed to differentiate the structure of this adjustable distance means?

Response to Arguments

6) Applicant's arguments filed 7/20/06 have been fully considered but they are not persuasive. Examiner appreciates the difference in what is claimed by applicant but does not see how the current set of claims differ from the prior art, given the difference being a rearrangement of one roller as it is disposed from the other roller in the prior art. As can be seen in Figure 1 of Folsdorf 472 the two rollers are disposed from one another in a slight diagonal fashion. Just that the difference being the roller capable of handling evaporated substance is disposed above the roller capable of handling the precipitated substance rather than the vice-versa as claimed by applicant. Examiner cannot distinguish a difference in function in the setup nor an advantage for why it would be done so. Applicant has not put forth

arguments as to why this setup could not be obviously modified by the teachings of Flosdorf 472. The arguments pertaining to claims 10 and 11 can be found in the claim objection put forth by examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to G. Nagesh Rao whose telephone number is (571) 272-2946. The examiner can normally be reached on 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571)272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GNR


YOGENDRA K. GUPTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700